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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/512,088	02/24/2000	Koichi Horikawa	Q57985	5415

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EXAMINER

WON, YOUNG N

ART UNIT PAPER NUMBER

2155

DATE MAILED: 10/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/512,088

Applicant(s)

HORIKAWA, KOICHI

Examiner

Young N Won

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 2-4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 4. 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-5 have been examined.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Fig.1 #10 and Fig.4 #205. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. Claims 2, 3, and 4 are objected to because of the following informalities: in claim 2 on page 14, line 9, "being verification"; claim 3 on page 14, line 2, "client of"; claim 4 on page 15 line 5 "aource" should be "source"; and claim 4 on page 15, lines 8-9, it is unclear as to who or what is

obtaining or being obtained (there should be commas where required, especially when the sentence is a run-on sentence). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 3 recites the limitation "layer 3 address processor" in page 15, line 5, and then recites, "layer 3 address extension processor" in page 15, line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Civanlar et al. (US 5828844 A) in view of Cox et al. (US 6189041 B1).

As per claim 1, Civanlar teaches of a method for transferring MPOA packets in an ATM network, comprising the step for determining by an MPOA server (see col.3, lines 18-22) which has received an address resolution request packet from an MPOA client (see Fig.1, #2; and col.3, lines 22-25) about whether or not said address resolution request packet is to be forwarded to the other MPOA server or the other MPOA client (see col.3, lines 25-32) based on layer 3 packet filter information (see col.3, lines 1-4 & 38-40; and col.4, lines 57-60). Civanlar does not explicitly teach that the packets, clients and servers are MPOA packets, MPOA clients, or MPOA servers, respectively, but such limitations are merely labels or terms imposed by the applicant and are not used standard in the art. Civanlar teaches of MPOA (see col.4, line 66). Cox teaches of MPOA (see col.3, lines 64-67).

As per claim 2, Civanlar teaches all the limitations except wherein the method comprising the step of transmitting by said MPOA client a source layer 3 address of the data packet that is to be a short cut by adding an extension of the MPOA address resolution request packet, while the MPOA server determines whether or not said MPOA address resolution request packet is to be forwarded to the other MPOA server or the other MPOA client based on said source layer 3 address placed in the extension and the destination layer 3 address in the MPOA address resolution request packet received from said MPOA client, after being verification of the layer 3 packet filter information. Cox teaches of wherein the method comprising the step of transmitting by said MPOA client a source layer 3 address of the data packet that is to be a short cut by adding an extension of the MPOA address resolution request packet (see Fig.5; col.5,

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lines 8-10; and col.5, line 63-col.6, line18). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Cox within the system of Civanlar, by implementing an extension as the mechanism to establish a shortcut within the packet transfer over ATM system, because "extension within an NHRP Resolution Request" can be forwarded by NHS (see Cox: col.6, lines 13-14) and NHS is a known prior art in the NHRP model for mapping IP addresses to create a cut-through path within not only it's own LIS , but it's neighboring NHS's which supports other LIS's (see Civanlar: col.4, lines 5-41).

As per claim 3, although Civanlar teaches wherein the method comprising the step for said MPOA client of: notification by the client MPOA packet processor of the MPOA address resolution request operation and source layer 3 address information to the source layer 3 address processor (see col.3, lines 1-5); and transmitting by the client MPOA packet-transmitting portion the MPOA address resolution request packet at said client MPOA packet processor to an MPOA server (see col.3, lines 11-18).

Civanlar does not teach that the MPOA packet extension was added (see claim 2 rejection). Also, Civanlar does not further teach wherein the method comprising the step for said MPOA client of: judging by the source layer 3 address extension processor which has received the notification about whether or not the outer instruction directs to include the source layer 3 address in the MPOA packet extension, and when the answer is yes, to make the MPOA packet extension include the source layer 3 address. Cox teaches wherein the method comprising the step for said MPOA client of: judging by the source layer 3 address extension processor which has received the notification

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about whether or not the outer instruction directs to include the source layer 3 address in the MPOA packet extension, and when the answer is yes, to make the MPOA packet extension include the source layer 3 address (see col.6, lines 6-10; col.9, line 65-col.10, line 8; and col.10, lines 26-27). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Cox within the system of Civanlar, by implementing a method of creating an extension within the packet transfer over ATM system, because Cox teaches that an extension can be employed for establishing shortcuts or cut-through paths.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Civanlar et al. (US 5828844 A) and Cox et al. (US 6189041 B1) further in view of Shur (US 5809233 A).

As per claims 4 and 5, Civanlar further teaches wherein the method comprising the step for said MPOA server of: receiving by the MPOA packet receiving portion the MPOA address resolution request packet from said MPOA client; checking by the server MPOA packet processor about whether or not the source layer 3 address is included in the received MPOA address resolution request packet, and when included, obtaining by the server MPOA packet processor of the source layer 3 address and the destination layer 3 address; retrieving by the layer 3 filter retrieving portion of the layer 3 filter information using said source layer 3 address and the destination layer 3 address as the key, and judging by said server MPOA packet processor about whether or not to

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permit passage of the filter (See col.3, lines 22-38); and directing the execution of processing for forwarding the received MPOA address resolution packet to the other MPOA server or the other MPOA client (see col.3, lines 30-32). Civanlar and Cox does not teach of directing the execution of error processing when not permitted to be forwarded or that error processing is a process for transmitting the MPOA packet which indicates that the address resolution has been failed toward the MPOA client. Shur teaches of directing the execution of error processing when not permitted to be forwarded, or that error processing is a process for transmitting the MPOA packet, which indicates that the address resolution has been failed toward the MPOA client (see col.7, lines 46-56). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Shur within the system of Civanlar and Cox, by implementing an error processing method within the packet transfer over ATM system, because when addresses are stale, the server would not know what to do and cause the connection to become idle or respond with bad data, thereby possibly creating delays and reducing throughput within the server system.

Conclusion

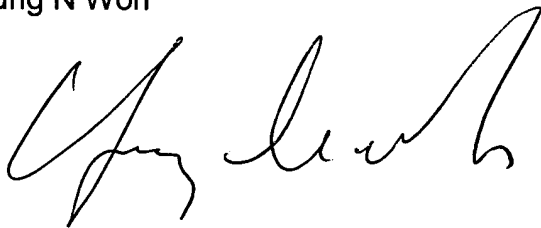
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 8AM-6PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Young N Won



October 10, 2002



AYAZ SHEIKH
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